DOCUMENT RESUME

ED 476 997 IR 021 725

AUTHOR Douglas, Charlene

TITLE Supporting and Hosting Web-Based Learning Systems in the University of Wisconsin System.

PUB DATE 2002-06-00

NOTE 6p.; In: ED-MEDIA 2002 World Conference on Educational Multimedia, Hypermedia & Telecommunications. Proceedings (14th, Denver, Colorado, June 24-29, 2002); see IR 021 687.

AVAILABLE FROM Association for the Advancement of Computing in Education (AACE), P.O. Box 3728, Norfolk, VA 23514. Tel: 757-623-7588; e-mail: info@aace.org; Web site: http://www.aace.org/DL/.

PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150)

EDRS PRICE EDRS Price MF01/PC01 Plus Postage.

DESCRIPTORS Computer Networks; Courseware; *Distance Education; Educational Development; Higher Education; Information Networks; *Information Services; *Information Systems; *Online Systems; Partnerships in Education; World Wide Web

IDENTIFIERS *Distributed Computing; *University of Wisconsin System

ABSTRACT

The University of Wisconsin System (UWS) has attempted to establish a well-defined set of support services for Internet-based teaching and learning for its 27 campuses and LI (Learning Innovations, a UWS organization that focuses on total online programs). The objectives of these services are: to provide all University of Wisconsin (UW) campuses with the opportunity to use distributed learning technologies to enhance teaching and learning, to guarantee a learning and teaching system infrastructure that enables on-campus and off-campus network-based courseware, and to provide a longer term funding model that will ensure core distributed learning services for all faculty and teaching staff. UWS's Distributed Learning System Environment has several services, including a Web-Based Learning System (WBLS), which is the focus of this paper. Discussion includes: faculty and student benefits; dot.edu, an Application Service Provider for the State of Wisconsin and beyond; the dot.edu partnership model; goals and mission of dot.edu; and lessons learned and reasons for success. (AEF)

Reproductions supplied by EDRS are the best that can be made from the original document.

Supporting and Hosting Web-Based Learning Systems in the University of Wisconsin System

(this document was created in MS Word 2000)

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

G.H. Marks

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Charlene Douglas
Director, dot.edu
University of Wisconsin System
Milwaukee, WI

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Economy of Scale

The University of Wisconsin System (UWS) consists of 27 individual campuses (two research institutions, eleven 4-year universities, thirteen 2-year colleges, and an extension) plus Learning Innovations (LI) (a UWS organization that focuses on total online programs). Several years ago UWS found itself inundated with requests from these individual campuses and LI for financial assistance for the following.

- Web-enhanced and web-based learning
- Enhancement of their respective libraries
- Expanded curricular redesign efforts

Since it was not possible for UWS to support such endeavors on each campus and since such funding would basically re-invent the wheel 28 different times, UWS decided to implement a Distributed Learning System Environment. The philosophical assumption behind this type of environment is that the 27 campuses of UWS plus LI could receive a much greater return on investment if they collectively take responsibility for infrastructure investments (with infrastructure being defined as a base that is universally accessible, potentially used by all and has value in its commonality).

The University of Wisconsin System has attempted to establish a well-defined set of support services for internet-based teaching and learning for its 27 campuses and LI. The objectives of these services are: 1) to provide all University of Wisconsin (UW) campuses with the opportunity to use distributed learning technologies to enhance teaching and learning, 2) to guarantee a learning and teaching system infrastructure (including software, hardware, and staffing) that enables on-campus and off-campus network-based courseware, and 3) to provide a longer term funding model that will ensure core distributed learning services for all faculty and teaching staff.

UWS's Distributed Learning System Environment includes such services as the following.

- Instructional Design, Course Development and Faculty Support
- Copyright Clearance Center
- Video Production and Digital Television
- Asynchronous Library Services
- Network Services
- Student Support Services
- Statewide Distance Education Communication, Coordination, Support, and Web Maintenance
- Web-Based Learning System (WBLS) Hosting, Help Desk, Training, and Support

ED 476 997

IR021725

BEST COPY AVAILABLE

It is the last service on which this presentation will focus. UWS sent out RFPs to all 27 campuses and LI to provide this service. The successful campuses were the University of Wisconsin - Eau Claire which focused on LearningSpace, the University of Wisconsin - Madison which focuses on WebCT, and the University of Wisconsin - Milwaukee (dot.edu) which focused on Web Course in a Box and Blackboard. Therefore, instead of providing this service at each UW campus and LI, the Web-Based Learning Systems provide this support from these three central locations for all UW campuses in a much more cost-effective fashion.

Web-Based Learning Systems (WBLS)

Services

For whichever of the products chosen, the following services are provided.

1. Hardware: server access, disk space as necessary
2. Software: for course development (license, vendor support, upgrades, renewals, separate instance); for course delivery to students
3. Staffing: professional development; instructional workshops in the use of the software; accessible and sustained support to institutions, educators, and students; instructional design consultation; 24x7 help desk (toll free number) for faculty and students; Network and System Administrators

Thus, WBLSs provided faculty and teaching academic staff throughout UWS a choice of four web-based learning tools for course presentation.

Faculty Benefits

The faculty using these tools report many benefits: versatile courseware, time for active learning, online courses that can mirror classwork, problem solving activities, and collaboration. These tools vary in ease of use and make it possible for faculty to create meaningful courses that range from the very basic to the highly interactive, from web-enhanced to distance education.

Student Benefits

Student benefits are numerous. Web-based and web-enhanced learning provides a consistent look and feel to course information and resources; provides anytime, anyplace, any pace instruction (most beneficial to non-traditional students); allows students to continue the conversation beyond the traditional classroom's constraints of time and space through collaborative tools such as discussion forums and virtual chats. Students now have the ability to begin the process of becoming lifelong learners.

dot.edu

dot.edu is an Application Service Provider for the State of Wisconsin and beyond. The impact of dot.edu has been tremendous: we have 6880 courses in some phase of development; 4500 faculty have been trained; and 131,000 students are enrolled in these courses. We are in both UW-System research institutions, 10 of the eleven 4-year UW-System universities, all thirteen 2-year UW-System colleges, UW-Extension, and Learning Innovations. We have 29 non UW-System partners who pay to use this service.

This involves 30 Dell servers; 4 larger Sun servers; a very large environment for the most recent web-authoring tool that we've added (Prometheus); a video server; a tremendous amount of travel, coordination, collaboration, strategic partnerships and, at present, a cost of approximately $1,000,000.

dot.edu Partnership Model

Process

The partners of dot.edu include all faculty, teaching academic staff, and administrators in the following categories:

- The UW System campuses
- Wisconsin public and private higher education institutions
- Wisconsin public and private schools and districts as well as education agencies in the state
- Non-educational institutions and those institutions outside the State of Wisconsin

Programs can be selected and uniquely organized to meet the needs of the particular partner. The Utility model is structured as a 3-stage implementation plan that eventually transfers responsibility for course development instruction from dot.edu to the partners.

Stage 1: dot.edu provides direct instruction and support to the on-site trainers

Stage 2: dot.edu provides direct instruction and support to first set of instructors, with support from on-site trainers

Stage 3: On-site trainers provide all direct instruction and support to subsequent sets of instructors, with support from dot.edu.

The course development instructional program design and implementation timeline are determined by the needs of the institution. A written implementation plan is designed jointly by dot.edu and the respective institution. It is developed with the flexibility necessary to meet changing needs. The campus eventually sustains the course development instruction.

Pricing

Pricing is constantly being revisited but, in general, contains an annual fee of approximately $30,000 and a per course section fee of approximately $150. Firm quotes are given upon request and after review of services needed. The fee includes the hosting, 24 hours of training and/or instructional design consultation, the 24x7 Solution Center, unlimited users, unlimited courses, and unlimited disk space. Additional training can be obtained for $200/hour plus expenses.

dot.edu does provide an Incubator for Prometheus (for those customers who might need time to determine if online education is for them, for customers to try out the dot.edu services, and for customers to try out the Prometheus software). A per course fee is charged for this service (prices given upon request; typical charge would be $500/course section).

UWS currently subsidizes the UW-System 27 campuses and LI so that each campus does not have to budget for these services - therefore, these services are provided, sponsored, and funded centrally. Non-UWS customers pay the fees mentioned above.

New Developments

It was realized that the WBLS, WiscNet, Wisconsin Public Television, the Pyle Center, Learning Innovations and others were providing their services to all educational institutions in Wisconsin. In order to make it easier for these educational institutions (with regard to costs, contact information, services provided, and so forth), it was determined that a type of clearing house be established to act as the conduit for the various state Service Providers. Thus, ITS@Wisconsin was formed (Instructional Technology Services @Wisconsin), providing a single point of contact for educational institutions in the State of Wisconsin. In doing so, the old name of Web-Based Learning Systems (WBLS) was abandoned.

As time progressed, UW-Eau Claire ceased offering LearningSpace and Web Course in a Box was purchased by Blackboard. In addition, a new web-authoring tool (Prometheus) was added to the mixture in December of 2000. Thus, UW-Madison offers WebCT and dot.edu offers Blackboard and Prometheus.

dot.edu has formed strategic partnerships with Dell, Sun Microsystems, WiscNet, Blackboard and Prometheus. In addition, dot.edu has recently received the Sun Center of Excellence award. Together with Sun Microsystems, Dell and Prometheus, dot.edu intends to take the dot.edu concept nationally to show other states that education can take care of education and provide a seamless PK-16 education.

Goals and Mission

The goals of dot.edu are not stagnant but ever changing.

- We will be partnering with the Student Accessibility Center at UW-Milwaukee to accompany us on all our training sessions to educate all faculty and students with regard to accessibility issues
- We will be instrumental in the formation of standards through the Wisconsin Co-Lab
- Disseminate knowledge
- Leverage resources to provide an economy of scale
- Support web-enhanced, hybrid, and online education
- Provide appropriate high-quality web-based learning systems
- Remove barriers preventing interaction between the UWS, PK-12, and other appropriate members of Wisconsin's educational community

The mission of dot.edu is also constantly expanding but has always remained the same – provide educational communities with robust and up-to-date e-learning system infrastructure including technology, training, support, and instructional design and to effectively apply these resources to enhance education. dot.edu hopes to be able to provide a seamless e-learning experience to PK-16 and beyond.

What We Have Learned and Reasons We've Succeeded

Lessons Learned

Much has been learned in the process of developing dot.edu. Since nothing like this existed, we are constantly "making it up" as we go along. Continual refinement of policies and procedures, pricing structures, service agreements, and services offered takes place. Some of the specific lessons we've learned follow.

1. Identity issues - each of these Service Providers exist on a specific central UW campus but each is funded and sponsored by the University of Wisconsin System
2. Customer support - this is a very intense and expensive aspect of the dot.edu, much more than anticipated at the beginning
3. Dealing with unknowns on each campus - this comes into play when the training takes place on our partners' respective campuses
4. New products - since this is such a changing, volatile field at present, new products are continually being analyzed and tested
5. Legalities - copyright and intellectual property issues
6. Instructional design - it is quite a challenge to provide instructional design and pedagogical consultation through a distributed system
7. Measuring capacity and demand - regarding disk space, number and types of servers, personnel needed
8. Students - staffing has to be supplemented by student workers
9. External funding - it is imperative that partnerships are developed and external funding is sought
10. Administrative systems - it is becoming more and more apparent that it is necessary that these web-authoring tools integrate with individual campus Administrative back-office systems

Why We've Been A Success

dot.edu has been a tremendous success because of a few very simple reasons.

- Customer service - fast, friendly, and thorough
- A great product which is continually being improved and enhanced
- A buy-in by central administration, campus administration, and faculty
- Having as an end product of all of this - true collaboration and teamwork throughout the State of Wisconsin and beyond
- A willingness to go that extra mile
- An adherence to the mission of the dot.edu and ITS@Wisconsin
- A willingness to take the risk and go where no one has gone before
- dot.edu **is** Education Serving Education

Conclusion

Several years ago the UW-System had the foresight to see that a problem existed and they designed a solution. They then had the tenacity to actually try their solution. Its success has exceeded everyone's greatest expectations. Through dot.edu, the rest of ITS@Wisconsin and the entire Distributed Learning System Environment, the UWS faculty and campuses can now take education in the State of Wisconsin to that next level.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

[X] This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

[ ] This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").